



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named

Inventor : Stan V. Lyons

Appln. No. : 10/718,754

Filed : November 21, 2003

Title : BULK MATERIAL IRRADIATION  
SYSTEM

Docket No. : M881.12-0017

Group Art Unit: 2881

Examiner: P. Johnston

**EXPRESS MAIL COVER SHEET**

Mail Stop Amendment  
Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SENT VIA EXPRESS MAIL**

Express Mail No.: EV 485711849 US

The following papers are being transmitted via **EXPRESS MAIL** to the U.S. Patent and  
Trademark Office on the date shown below:

1. Response;
2. Fee Transmittal (in duplicate); and
3. Return receipt postcard.

Respectfully submitted,

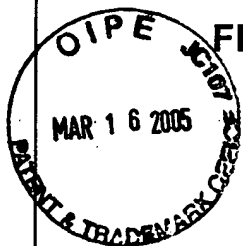
KINNEY & LANGE, P.A.

Date: 3/16/05

By 

Alan M. Koenck, Reg. No. 43,724  
THE KINNEY & LANGE BUILDING  
312 South Third Street  
Minneapolis, MN 55415-1002  
Telephone: (612) 339-1863  
Fax: (612) 339-6580

AMK:bmj



## FEE TRANSMITTAL

## Complete if Known

Application No.	10/718,754
Filing Date	November 21, 2003
First Named Inventor	Stan V. Lyons
Group Art Unit	2881
Examiner Name	P. Johnston
Atty. Docket Number	M881.12-0017

Total Amount of Payment \$0.00

## METHOD OF PAYMENT (Check One)

1. ☒ The Commissioner is hereby authorized to charge any additional fee required under 37 C.F.R. 1.16 and 1.17 and credit any over payments to Deposit Account No. 11-0982. Deposit Account Name: Kinney & Lange, P.A. A duplicate copy of this communication is enclosed.

2. ☐ Check Enclosed

## FEE CALCULATION

## 1. BASIC FILING FEE

Appn. Type	FILING FEE FEE/SMALL	SEARCH FEES FEE/SMALL	EXAM FEES FEE/SMALL	FEES
Utility	300 / 150	500 / 250	200 / 100	—
Design	200 / 100	100 / 50	130 / 65	—
Reissue	300 / 150	500 / 250	600 / 300	—
Provisional	200 / 100	-0- / -0-	-0- / -0-	—

Subtotal (1) \$0.00

## 2. EXTRA CLAIM FEES

	Number Claims	Prior**	Extra	Fee from Fee Paid Below
Total	17	20	= 0	x * = *
Indep.	6	6	= 0	x * = *
Multiple Dependent Claims				* = *

\*\*Insert 3 and 20, or number previously paid if greater; Reissue see below

Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Description
1202	50	2202	25	Claims in excess of 20
1201	200	2201	100	Independent claims in excess of 3
1203	360	2203	180	Multiple Dependent Claim
1204	200	2204	100	Reissue Independent Claims Over Original Patent
1205	50	2205	25	Reissue claims in excess of 20 and over original patent

## 3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 small) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 C.F.R.

## FEE CALCULATION (Continued)

## 3. ADDITIONAL FEES

Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description	Fee paid
1051	130	2051	65	Surcharge - Late filing fee or oath	*
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	*
1053	130	1053	130	Non-English specification	*
1812	2,520	1812	2,520	For Filing a Request for Reexamination	*
1251	120	2251	60	Extension for reply within first month	*
1252	450	2252	225	Extension for reply within second month	*
1253	1,020	2253	510	Extension for reply within third month	*
1254	1,590	2254	795	Extension for reply within fourth month	*
1255	2,160	2255	1,080	Extension for reply within fifth month	*
1402	500	2402	250	Filing a brief in support of an appeal	*
1403	1,000	2403	500	Request for oral hearing	*
1814	130	2814	65	Terminal Disclaimer Fee	*
1452	500	2452	250	Petition to revive - unavoidable	*
1453	1,500	2453	750	Petition to revive - unintentional	*
1501	1,400	2501	700	Utility/Reissue issue fee	*
1502	800	2502	400	Design issue fee	*
1460	130	1460	130	Petitions to the Commissioner	*
1807	50	1807	50	Petitions related to provisional applications	*
1806	180	1806	180	Submission of Information Disclosure Statement	*
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	*
1801	790	2801	395	Request for Continued Examination (RCE)	*
Other fee (specify) _____					*

Subtotal (3) \$0.00

Signature

Alan M. Koenck

Reg. No.

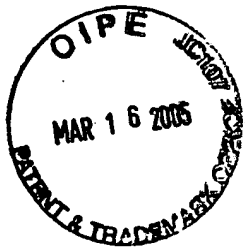
43,724

Date

March 16, 2005

Deposit Account No.

11-0982



3-17-05

IFC

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named

Inventor : Stan V. Lyons

Appln. No. : 10/718,754

Filed : November 21, 2003

Title : BULK MATERIAL IRRADIATION  
SYSTEM

Docket No. : M881.12-0017

Group Art Unit: 2881

Examiner: P. Johnston

**RESPONSE**

Mail Stop Amendment  
Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SENT VIA EXPRESS MAIL**

Express Mail No.: EV 485711849 US

This is in response to the Office Action mailed on December 17, 2004, in which all of the pending claims (1, 2, 4-15, 17 and 18) were rejected. Specifically, according to the Office Action, claims 1, 2, 4-15, 17 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Pub. 2003/0129274 (Garwood) in view of U.S. Patent No. 5,825,037 (Nablo), claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Garwood and Nablo in view of McKeown (U.S. Patent No. 5,847,401), and claims 9-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Garwood, Nablo, and McKeown in further view of Kanter (U.S. Patent No. 4,757,201).

Independent Claim 1

Claim 1 reads as follows:

1. A bulk material irradiation system comprising:  
an input for inserting bulk material;  
a bulk material tube connected to the input and forming a path for bulk material flow;  
a pumping assembly connected to the bulk material tube for forcing the bulk material to  
advance through the bulk material tube;